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THE ARAB REPUBLIC OF EGYPT

MONTHLY WEATHER REPORT

VOLUME 9

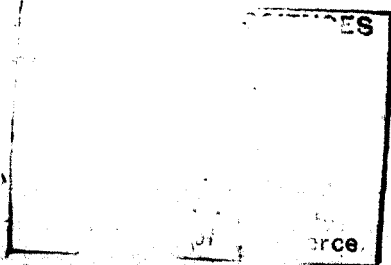
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THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO



National Oceanic and Atmospheric Administration

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PUBLICATIONS OF THE METEOROLOGICAL AUTHORITY OF THE ARAB REPUBLIC OF EGYPT—CAIRO

In fulfilment of its duties, the Egyptian Meteorological Authority issues several reports and publications on weather, climate and agro-meteorology. The principal publications are described on this page.

Orders for publications should be addressed to :

“Chairman of the Board of Directors, Meteorological Authority, Kubri-el-Qubbeh — CAIRO”.

THE DAILY WEATHER REPORT

This report is issued daily by the Meteorological Authority since the year 1901. It includes surface and upper air observations carried out by the relevant networks of the Republic at the principal hours of observations.

As from January 1968 this report was revised to include a condensed representative selection of surface and upper air observations besides the 1200 U.T. surface & 500 mb charts.

As from 1st January 1972, the Daily Weather Report will not be issued or distributed because it does not serve no longer any good purpose as it used to be in the past. The Meteorological Authority is ready to supply the recipients of the Report with any information used to be included in it, if they so desire.

THE MONTHLY WEATHER REPORT

First issued in 1909, the Monthly Weather Report served to give a brief summary of the weather conditions that prevailed over Egypt during the month, with a table showing the mean values for few meteorological elements and their deviations from the normal values. From 1954 to 1957 this report was in a rapid state of development and extension resulting into a voluminous report on January 1958 giving surface, upper air, and agro-meteorological data for Egypt.

As from January 1964, the Monthly Weather Report was pressed to give climatological data for a representative selection of synoptic stations.

THE AGRO-METEOROLOGICAL ABRIDGED MONTHLY REPORT

Gives a review of weather experienced in the agro-meteorological stations of Egypt as well as monthly values of certain elements.

THE ANNUAL REPORT

This report gives annual values and statistics for the various meteorological elements, together with a summary of the weather conditions that prevailed during all months of the year.

CLIMATOLOGICAL NORMALS FOR EGYPT

A voluminous edition was issued in March 1968 which brings normals and mean values up till 1960.

METEOROLOGICAL RESEARCH BULLETIN

First issued in January 1969 on a bi-annual basis. It includes research works carried out by members of staff of “The Meteorological Institute for Research and Training” and the Operational Divisions of the Meteorological Authority.

TECHNICAL NOTES

As from October 1970, the Meteorological Authority started to issue a new series of publications in the form of Technical Notes (non periodical) on subjects related to studies and applications of meteorology in different fields for the benefit of personnel working in these fields.



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**THE EGYPTIAN METEOROLOGICAL AUTHORITY
CAIRO**

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GENERAL SUMMARY OF WEATHER CONDITIONS

NOVEMBER 1966

Generally hot during the first week : rather cold most of the second week in the northern parts where heavy rain associated with thunderstorms and hail fell between 8th and 10th. Generally mild weather otherwise with frequent early morning mist and fog over Delta, Canal and Cairo areas.

GENERAL DESCRIPTION OF WEATHER

This month started with a prevailing heat wave of moderate intensity which was more pronounced in the interior parts of the Republic during the first week. The break down of this heat wave was followed by rather cold and rainy weather most of the second week in the Mediterranean, Lower Egypt & Cairo districts. Rain was heavy and associated with thundery activity and hail over scattered parts on the 8th, 9th & 11th. On the 8th in particular the daily rain attained records at Dekheila (64 mms), Balteam (50 mms), Shebin El Kom (15 mms), Mostafa Helmi (22 mms) & Almaza (16 mms).

During the second half of the month, weather was mild in the northern & central parts ; and hot in the southern parts with light rain associated with thunderstorms over few localities on the 23rd & 24th. Early morning fog & mist developed in large frequencies over Delta, Canal & Cairo areas.

PRESSURE DISTRIBUTION

The most important features of pressure distribution on the surface maps during this month were :

— The Siberian anticyclone.

— Deep northern low pressure systems coming from the Atlantic and passing through North Urasia.

— Travelling secondary depressions which developed either over West Mediterranean or adjacent vicinities.

The first secondary depression this month was observed over Greece on the 1st ; it moved rapidly NE wards and reached north of the Caspian Sea on the 3rd.

The second secondary depression developed over West Mediterranean on the 3rd, proceeded slowly eastwards while deepening appreciably on the 4th. It reached Central Mediterranean and filled up rapidly on the 5th, when a shallow secondary depression developed over north of Egypt. This desert depression proceeded NE wards attained Cyprus area on the 7th where it deepened and remained till the 10th. During this period the Siberian anticyclone extended SW wards and operated over the Balkans & Central Mediterranean.

The third secondary depression appeared west of Italy on the 11th and moved eastwards. On the 13th it reached Greece while a new secondary depression developed over East Mediterranean. These two secondaries proceeded NE wards afterwards while filling.

The fourth secondary depression was formed also west of Italy on the 15th. It moved slowly eastwards and on the 17th & 18th when it deepened and enlarged its area covering Italy, Balkans & Central Mediterranean. Afterwards, it filled rapidly while remained stationary.

The fifth and sixth secondary depressions developed over Italy on the 23rd & 28th respectively. They moved Eastwards and their southern troughs traversed East Mediterranean on the 26th & 29th respectively.

East Mediterranean in general and Egypt in particular were subsequently affected by the approach & transits of the above mentioned six secondary depressions and the extension of high pressure from SW Russia to Asia Minor and East Mediterranean. As a result, the barometric pressure over Egypt experienced six oscillations with their minima round the 5th, 9th, 13th, 18th, 26th & 29th respectively. It was generally below normal most of the first half of the month ; and above normal most of the second half.

The outstanding features of pressure distribution over the 700 & 500 m.b. charts were :

— Deep upper low pressure systems over North Urasia and North Atlantic.

— Transitory secondary upper troughs or lows through middle latitudes.

— A quasi- stationary secondary upper low over East Mediterranean from the 7th till the 12th.

— High pressure south of latitude 30°N.

SURFACE WIND

During this month the prevailing winds blew between NE & NW ly directions with the exception of few days in the second week when S/SW winds prevailed in the northern & central parts. Winds were generally light to moderate and became fresh to strong during several days over scattered localities mainly in the Red Sea and west of the Mediterranean districts. Calms were frequent most of night & early morning intervals over scattered localities.

Gales were reported at : Mersa Matruh on the 9th and at Port Said and Fayed on the 8th.

TEMPERATURE

Rather cold and rainy weather was experienced during the second week when maximum temperature fell slightly below its normal and its values ranged between 22°C & 27°C in the northern & central parts and between 27°C & 32°C in the southern parts. During rest of the month maximum temperature remained above its normal (3°C-6°C) and its values ranged between 24°C & 30°C in the northern parts, between 25°C & 34°C in the central parts and between 30°C & 36°C in the southern parts.

The absolute maximum temperature for the Republic was 37.6°C reported at Minya & Asyout on the 2nd.

Minimum temperature remained above its normal during the month (2°C-5°C) with the exception of few scattered days on which it was slightly below normal. Its values ranged in general between 10°C & 18°C in the cen-

tral parts and between 14°C & 22°C in the northern & southern parts.

The absolute minimum temperature for the Republic was 5.6°C reported at Farafra on the 18th.

PRECIPITATION

This month was characterized by an outstanding rainy period most of the second week during which rain was heavy, widespread and confined to the northern parts of the Republic.

Rain was associated with thunderstorms and in particular with hail over scattered localities in Lower Egypt & Cairo area districts on the 8th when the daily rain attained record values at Dekheila (64 mms), Balteam (50 mms), Shebin El Kom (15 mms), Mostafa Helmi (22mms) and Almaza (16 mms). In addition light thundery rain fell over Aswan on the 23rd and over Quseir on the 24th.

The absolute daily rainfall was 102.0 mm reported at Borg El Arab on the 9th.

The absolute monthly rainfall was 142.5 mm reported at Borg El Arab.

Cairo, January 1972

Chairman (M. F. TAHA)

Board of Directors

SURFACE DATA

**Table A 1.—MONTHLY VALUES OF THE ATMOSPHERIC PRESSURE, AIR TEMPERATURE, RELATIVE HUMIDITY, BRIGHT SUNSHINE DURATION & PICHE EVAPORATION
NOVEMBER — 1966**

| STATION | Atmospheric Pressure (mbs) M.S.L | | Air Temperature °C | | | | | | | | | | Relative Humidity % | | Bright Sunshine Duration (Hours) | | | Piche Evaporation mm. Mean |
|-----------------------|-------------------------------------|------------------------------|--------------------|------------------------------|-------------|------------------------------|----------|----------|------------------------------|----------|------------------------------|------|------------------------------|-----------------|----------------------------------|----|------|-------------------------------|
| | | | Maximum | | Minimum | | A+B 2 | Dry Bulb | | Wet Bulb | | | | | | | | |
| | Mean | D.F. Normal or Average | (A) Mean | D.F. Normal or Average | (B) Mean | D.F. Normal or Average | | Mean | D.F. Normal or Average | Mean | D.F. Normal or Average | Mean | D.F. Normal or Average | Total Actual | Total Possible | % | | |
| Sallum | 1016.8 | —1.0 | 25.0 | +0.4 | 17.6 | +2.7 | 21.3 | 21.0 | +1.2 | 16.8 | +1.5 | 64 | +4 | — | — | — | 7.3 | |
| Mersa Matruh (A) | 1016.9 | —0.9 | 24.8 | +1.3 | 15.0 | +1.6 | 19.9 | 19.8 | +1.6 | 17.0 | +2.3 | 74 | +7 | — | — | — | 5.6 | |
| Alexandria . . . (A) | 1016.1 | —0.9 | 26.1 | +1.6 | 16.4 | +1.7 | 21.2 | 20.9 | +1.6 | 18.1 | +2.0 | 75 | +5 | 240.2 | 318.0 | 76 | 4.3 | |
| Port Said . . . (A) | 1015.7 | —0.8 | 24.9 | +0.9 | 21.0 | +2.5 | 23.0 | 22.7 | +1.8 | 20.1 | +2.5 | 78 | +7 | 244.2 | 318.0 | 77 | 5.4 | |
| El Arish | 1015.7 | —1.4 | 27.7 | +2.5 | 16.2 | +1.9 | 22.0 | 21.5 | +2.0 | 18.3 | +2.0 | 73 | +2 | — | — | — | 4.3 | |
| Ghazsa | 1015.4 | —1.4 | 27.0 | +3.0 | 17.2 | +2.7 | 22.1 | 21.9 | +2.6 | 17.1 | +1.0 | 59 | —11 | 249.0 | 317.2 | 78 | 5.0 | |
| Tanta | 1014.6 | —2.4 | 27.7 | +1.9 | 16.2 | +3.2 | 22.0 | 20.7 | +2.3 | 17.9 | +2.7 | 75 | +5 | 243.6 | 318.8 | 76 | 3.3 | |
| Cairo (A) | 1015.3 | —1.8 | 27.7 | +2.5 | 16.7 | +2.9 | 22.2 | 21.7 | +2.4 | 17.2 | +2.2 | 62 | +1 | — | — | — | 9.8 | |
| Fayoum | 1015.0 | —2.4 | 30.0 | +3.5 | 16.7 | +2.5 | 22.8 | 21.9 | +2.4 | 17.2 | +2.1 | 60 | +1 | — | — | — | 4.4 | |
| Minya (A) | 1014.6 | —2.0 | 29.6 | +2.8 | 12.9 | +1.4 | 21.2 | 20.4 | +2.0 | 15.2 | +0.7 | 54 | —6 | 270.2 | 323.8 | 83 | 6.4 | |
| Assyout (A) | 1014.1 | —2.5 | 30.0 | +3.4 | 15.8 | +3.0 | 22.9 | 22.2 | +2.8 | 15.4 | +1.8 | 44 | —4 | — | — | — | 10.5 | |
| Luxor (A) | 1013.4 | —1.2 | 32.6 | +2.9 | 15.8 | +3.6 | 24.2 | 23.8 | +4.1 | 16.6 | +1.8 | 44 | —3 | — | — | — | 7.5 | |
| Aswan (A) | 1012.6 | —1.8 | 32.8 | +2.3 | 17.8 | +3.2 | 25.3 | 25.1 | +2.7 | 16.2 | +2.7 | 35 | +3 | — | — | — | 11.9 | |
| Siwa | 1016.5 | —1.5 | 27.8 | +1.5 | 12.6 | +2.5 | 20.2 | 19.6 | +1.6 | 14.3 | +1.7 | 52 | +2 | — | — | — | 7.6 | |
| Bahariya | 1015.2 | —2.5 | 29.8 | +3.6 | 14.5 | +3.2 | 22.2 | 21.5 | +3.3 | 15.0 | +1.5 | 46 | —5 | — | — | — | 6.5 | |
| Farafra | 1016.7 | —1.8 | 28.9 | +2.7 | 12.6 | +1.9 | 20.8 | 20.4 | +2.1 | 14.0 | +2.1 | 45 | +2 | — | — | — | 9.7 | |
| Dakhla | 1015.0 | —0.4 | 30.5 | +2.8 | 12.5 | +1.0 | 21.5 | 21.1 | +2.0 | 13.4 | +1.4 | 36 | —2 | — | — | — | 11.5 | |
| Kharga | 1013.6 | —2.5 | 31.8 | +3.1 | 16.8 | +3.9 | 24.3 | 24.5 | +3.9 | 15.1 | +1.7 | 35 | —7 | 306.4 | 328.3 | 93 | 16.6 | |
| Tor | 1014.4 | —0.6 | 28.5 | +1.9 | 16.5 | +1.9 | 22.5 | 22.7 | +1.8 | 17.6 | +1.8 | 57 | +1 | — | — | — | 8.0 | |
| Hurghada | 1013.7 | —1.1 | 28.7 | +2.8 | 17.6 | +2.1 | 23.2 | 23.1 | +2.2 | 18.0 | +2.3 | 59 | +5 | — | — | — | 10.4 | |
| Quseir | 1014.4 | —0.2 | 28.4 | +1.1 | 20.5 | +1.0 | 24.4 | 24.6 | +1.5 | 19.3 | +2.0 | 58 | +5 | — | — | — | 10.9 | |

TABLE A 2.—MAXIMUM AND MINIMUM AIR TEMPERATURES

NOVEMBER — 1966

| STATION | Maximum Temperature °C | | | | | | | | | Grass Min. Temp. | | Minimum Temperature °C | | | | | | | | |
|----------------|------------------------|------|--------|----------|----------------------------|-----|-----|-----|-----|------------------|----------------|------------------------|------|--------|------|-----------------------------|-----|-----|------|--|
| | Highest | Date | Lowest | Date | No. of Days with Max-Temp. | | | | | Mean | D. From Normal | Highest | Date | Lowest | Date | No. of Days with Min. Temp. | | | | |
| | | | | | >25 | >30 | >35 | >40 | >45 | | | | | | | <10 | < 5 | < 0 | <- 5 | |
| Sallam | 30.4 | 1 | 21.4 | 30 | 12 | 1 | 0 | 0 | 0 | 16.9 | — | 22.2 | 3 | 12.1 | 30 | 0 | 0 | 0 | 0 | |
| Marout Matruh. | (A) 29.5 | 1 | 21.2 | 30 | 10 | 0 | 0 | 0 | 0 | — | — | 19.6 | 3 | 11.5 | 20 | 0 | 0 | 0 | 0 | |
| Alexandria | (A) 31.1 | 5 | 22.3 | 8 | 19 | 3 | 0 | 0 | 0 | — | — | 21.8 | 3 | 12.0 | 28 | 0 | 0 | 0 | 0 | |
| Port Said | (A) 28.7 | 1 | 21.2 | 10 | 11 | 0 | 0 | 0 | 0 | 19.4 | — | 25.2 | 3,4 | 16.8 | 28 | 0 | 0 | 0 | 0 | |
| El Arish | 35.4 | 2 | 24.8 | 30 | 28 | 6 | 1 | 0 | 0 | 14.4 | — | 20.4 | 2 | 11.8 | 26 | 0 | 0 | 0 | 0 | |
| Ghazze | 35.4 | 1 | 24.0 | 10,12,30 | 21 | 5 | 1 | 0 | 0 | 15.6 | — | 23.2 | 2 | 14.2 | 25 | 0 | 0 | 0 | 0 | |
| Tanta. | 33.0 | 1 | 21.5 | 10 | 26 | 7 | 0 | 0 | 0 | — | — | 21.7 | 2 | 11.2 | 27 | 0 | 0 | 0 | 0 | |
| Cairo. | (A) 34.8 | 2 | 23.6 | 30 | 23 | 6 | 0 | 0 | 0 | — | — | 20.4 | 5 | 11.4 | 26 | 0 | 0 | 0 | 0 | |
| Fayoum | 36.8 | 2 | 25.1 | 30 | 30 | 16 | 1 | 0 | 0 | 13.6 | — | 20.0 | 2 | 10.9 | 27 | 0 | 0 | 0 | 0 | |
| Minya | (A) 37.6 | 2 | 25.5 | 10,11,30 | 30 | 12 | 2 | 0 | 0 | 11.5 | — | 18.4 | 2 | 8.4 | 18 | 6 | 0 | 0 | 0 | |
| Assiout | (A) 37.6 | 2 | 25.3 | 16 | 30 | 15 | 3 | 0 | 0 | 14.0 | — | 21.7 | 2 | 12.5 | 17 | 0 | 0 | 0 | 0 | |
| Luxor | (A) 37.0 | 2 | 27.0 | 11 | 30 | 23 | 8 | 0 | 0 | 10.7 | — | 22.0 | 1 | 12.8 | 11 | 0 | 0 | 0 | 0 | |
| Aswan | (A) 37.0 | 19 | 26.0 | 11 | 30 | 24 | 8 | 0 | 0 | — | — | 23.2 | 1 | 13.3 | 11 | 0 | 0 | 0 | 0 | |
| Siwa | 33.3 | 6 | 21.4 | 30 | 24 | 7 | 0 | 0 | 0 | 10.8 | — | 17.7 | 4 | 7.2 | 19 | 6 | 0 | 0 | 0 | |
| Bahariya | 37.0 | 2 | 23.8 | 10 | 28 | 5 | 1 | 0 | 0 | 12.5 | — | 21.4 | 3 | 9.4 | 17 | 3 | 0 | 0 | 0 | |
| Farafra | 36.6 | 3 | 22.2 | 11 | 25 | 10 | 2 | 0 | 0 | 11.7 | — | 19.9 | 3 | 5.6 | 18 | 5 | 0 | 0 | 0 | |
| Dakhla | 37.4 | 2 | 24.2 | 10 | 29 | 18 | 3 | 0 | 0 | — | — | 18.4 | 2 | 6.5 | 18 | 3 | 0 | 0 | 0 | |
| Kharga | 37.4 | 1 | 26.9 | 16 | 30 | 20 | 9 | 0 | 0 | 14.2 | — | 23.2 | 23 | 12.0 | 12 | 0 | 0 | 0 | 0 | |
| Tor | 33.0 | 6 | 25.2 | 12 | 30 | 7 | 0 | 0 | 0 | — | — | 21.7 | 1 | 13.4 | 26 | 0 | 0 | 0 | 0 | |
| Hurgada | 32.4 | 2 | 26.2 | 11,12 | 30 | 8 | 0 | 0 | 0 | 15.8 | — | 21.2 | 1 | 14.8 | 11 | 0 | 0 | 0 | 0 | |
| Quesir | 30.3 | 7 | 26.4 | 13 | 30 | 1 | 0 | 0 | 0 | 19.5 | — | 22.6 | 1 | 17.2 | 25 | 0 | 0 | 0 | 0 | |

TABLE A 3.—SKY COVER AND RAINFALL

NOVEMBER — 1966

| Station | Mean Sky Cover (Oct) | | | | | Rainfall (mms) | | | | | | | | | | |
|--------------------------|----------------------|------|------|------|-------|-----------------|---------------------|-------------------------|------|------------------------------------|------|------|------|-----|-----|-----|
| | 00 | 06 | 12 | 18 | Daily | Total Amount | Dev. From Normal | Max. Fall in one day | | Number of days with Amount of Rain | | | | | | |
| | U.T. | U.T. | U.T. | U.T. | Mean | | | Amount | Date | <0.1 | ≥0.1 | ≥1.0 | ≥5.0 | ≥10 | ≥25 | ≥50 |
| Sallum | 3.2 | 3.4 | 5.2 | 3.7 | 3.8 | 1.7 | -26.8 | 1.1 | 11 | 0 | 3 | 1 | 0 | 0 | 0 | 0 |
| Matruh (A) | 2.9 | 4.0 | 4.7 | 3.4 | 3.7 | 43.8 | +20.2 | 22.4 | 8 | 4 | 4 | 3 | 2 | 1 | 0 | 0 |
| Alexandria (A) | 3.3 | 4.3 | 3.9 | 3.3 | 3.7 | 117.5 | +88.7 | 64.6 | 8 | 1 | 7 | 4 | 4 | 3 | 2 | 1 |
| Port Said (A) | 1.8 | 2.9 | 2.6 | 1.8 | 2.3 | 4.5 | -5.2 | 2.8 | 8 | 0 | 3 | 2 | 0 | 0 | 0 | 0 |
| El Arish | 2.4 | 3.0 | 3.1 | 2.9 | 3.0 | 1.3 | -15.5 | 0.7 | 11 | 0 | 3 | 0 | 0 | 0 | 0 | 0 |
| Ghazma | 1.1 | 2.7 | 2.6 | 1.4 | 1.9 | 12.5 | -42.7 | 8.1 | 11 | 0 | 4 | 4 | 1 | 0 | 0 | 0 |
| Tanta | 1.6 | 3.4 | 3.2 | 1.2 | 2.2 | 16.8 | +12.6 | 10.9 | 11 | 0 | 3 | 2 | 2 | 1 | 0 | 0 |
| Cairo (A) | 2.5 | 3.9 | 3.7 | 2.4 | 3.0 | 12.0 | +9.3 | 11.0 | 8 | 0 | 3 | 1 | 1 | 1 | 0 | 0 |
| Fayoum | — | 2.1 | 2.9 | 2.4 | — | 0.0 | -0.5 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Minya (A) | 0.7 | 1.5 | 2.4 | 1.1 | 1.4 | 0.0 | -0.2 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Assiout (A) | 0.5 | 0.9 | 1.7 | 0.6 | 0.9 | 0.0 | -Tr. | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Luxor (A) | 0.7 | 0.8 | 1.5 | 1.2 | 1.0 | 0.0 | -0.1 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aswan (A) | 0.3 | 0.9 | 2.7 | 3.0 | 1.2 | 1.4 | +1.4 | 1.4 | 23 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Siva | 1.1 | 1.6 | 3.4 | 1.8 | 2.0 | 0.0 | -0.6 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bahariya | 0.7 | 2.1 | 2.7 | 1.4 | 1.7 | 0.0 | -0.6 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Farafr | — | 1.0 | 2.3 | 0.7 | — | 0.0 | -0.1 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dakhla | — | 0.4 | 1.5 | 0.3 | — | 0.0 | -Tr. | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kharga | 0.4 | 0.9 | 0.9 | 0.6 | 0.7 | 0.0 | -0.1 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tor | 1.2 | 1.4 | 2.7 | 1.4 | 1.7 | 0.0 | -1.8 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hurgada | 0.6 | 1.4 | 1.4 | 1.1 | 1.0 | 0.0 | -0.2 | 0.0 | — | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Quesir | 0.3 | 1.6 | 1.6 | 1.0 | 1.1 | 2.4 | +0.5 | 2.0 | 24 | 0 | 2 | 1 | 0 | 0 | 0 | 0 |

TABLE A 4—DAYS OF OCCURRENCE OF MISCELLANEOUS WEATHER PHENOMENA.

NOVEMBER—1966

| Station | Precipitation | | | | Frost | Thunderstorm | Mist Vis \geq 1000 metres | Fog Vis $<$ 1000 Metres | Haze Vis \geq 1000 Metres | Thick Haze Vis $<$ 1000 Metres | Dust or Sandrising Vis \geq 1000 Metres | Dust or Sandstorm Vis $<$ 1000 Metres | Gale | Clear Sky | Cloudy Sky |
|----------------------------|---------------|------|-------------|------|-------|--------------|-----------------------------|-------------------------|-----------------------------|--------------------------------|---|---------------------------------------|------|-----------|------------|
| | Rain | Snow | Ice Pellets | Hail | | | | | | | | | | | |
| Sallum | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 |
| Mersa Matruh (A) | 4 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 0 | 0 | 2 | 0 | 1 | 5 | 2 |
| Alexandria (A) | 7 | 0 | 0 | 2 | 0 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 9 | 5 |
| Port Said (A) | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 17 | 1 |
| El Arish | 3 | 0 | 0 | 0 | 0 | 2 | 7 | 2 | 0 | 0 | 2 | 1 | 0 | 14 | 2 |
| Cherxa | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 |
| Tanta | 3 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 18 | 1 |
| Cairo | 3 | 0 | 0 | 0 | 0 | 1 | 15 | 3 | 7 | 0 | 2 | 0 | 0 | 7 | 0 |
| Fayoum | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | — | — |
| Minya (A) | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 25 | 0 |
| Assyout (A) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 |
| Luxor (A) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 26 | 0 |
| Aswan (A) | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 25 | 0 |
| Siwa | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 |
| Bahariya | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |
| Farafra | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | — | — |
| Dakhla | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 |
| Kharga | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 |
| Tor | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |
| Hurghada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 0 |
| Quesir | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 24 | 0 |

**Table A 5.—NUMBER IN HOURS OF OCCURRENCES OF CONCURRENT SURFACE
WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES
NOVEMBER — 1966**

| Station | calm (hours) | Variable (hours) | Unrecorded (hours) | Wind speed in knots | Number in hours of occurrences of wind blowing from the ranges of directions indicated | | | | | | | | | | | | |
|-----------------------|--------------|------------------|--------------------|------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|
| | | | | | 345 | 015 | 045 | 075 | 105 | 135 | 165 | 195 | 225 | 255 | 285 | 315 | All directions |
| | | | | | / | / | / | / | / | / | / | / | / | / | / | / | |
| | | | | | 014 | 044 | 074 | 104 | 134 | 164 | 194 | 224 | 254 | 284 | 314 | 344 | |
| Sallum | 22 | 13 | 44 | 1-10 | 26 | 152 | 8 | 25 | 21 | 13 | 14 | 20 | 16 | 29 | 45 | 56 | 425 |
| | | | | 11-27 | 4 | 33 | 0 | 0 | 0 | 5 | 7 | 27 | 15 | 24 | 56 | 45 | 216 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 30 | 185 | 8 | 25 | 21 | 18 | 21 | 47 | 31 | 53 | 101 | 101 | 641 |
| Meras Matruh . (A) | 3 | 0 | 0 | 1-10 | 17 | 24 | 35 | 89 | 27 | 27 | 39 | 29 | 32 | 27 | 14 | 14 | 374 |
| | | | | 11-27 | 48 | 42 | 35 | 48 | 5 | 2 | 8 | 26 | 25 | 44 | 16 | 43 | 342 |
| | | | | 28-47 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 65 | 67 | 70 | 137 | 32 | 29 | 47 | 55 | 57 | 71 | 30 | 57 | 717 |
| Alexandria . . . (A) | 28 | 0 | 0 | 1-10 | 61 | 168 | 115 | 29 | 11 | 15 | 21 | 36 | 11 | 32 | 28 | 73 | 600 |
| | | | | 11-27 | 11 | 37 | 21 | 0 | 0 | 0 | 3 | 5 | 11 | 1 | 3 | 0 | 92 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 72 | 205 | 136 | 29 | 11 | 15 | 24 | 41 | 22 | 33 | 31 | 73 | 692 |
| Port Said . . . (A) | 6 | 3 | 0 | 1-10 | 66 | 65 | 32 | 6 | 7 | 11 | 22 | 34 | 54 | 35 | 9 | 73 | 414 |
| | | | | 11-27 | 42 | 128 | 56 | 1 | 0 | 1 | 13 | 23 | 2 | 1 | 5 | 22 | 294 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 108 | 193 | 88 | 7 | 7 | 12 | 35 | 57 | 54 | 38 | 14 | 96 | 711 |
| Tanta | 61 | 0 | 0 | 1-10 | 44 | 70 | 148 | 124 | 57 | 11 | 1 | 2 | 32 | 56 | 51 | 56 | 652 |
| | | | | 11-27 | 0 | 0 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 44 | 70 | 152 | 125 | 58 | 11 | 1 | 2 | 32 | 56 | 52 | 56 | 659 |
| Fayoum | 35 | 1 | 0 | 1-10 | 180 | 217 | 38 | 7 | 6 | 8 | 6 | 24 | 60 | 25 | 18 | 52 | 641 |
| | | | | 11-27 | 1 | 32 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 43 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 181 | 249 | 40 | 7 | 6 | 8 | 6 | 24 | 63 | 30 | 18 | 52 | 684 |
| Minya (A) | 44 | 88 | 14 | 1-10 | 171 | 7 | 0 | 1 | 0 | 13 | 22 | 4 | 15 | 17 | 21 | 218 | 489 |
| | | | | 11-27 | 54 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 9 | 17 | 35 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 225 | 7 | 0 | 1 | 0 | 13 | 23 | 4 | 15 | 19 | 30 | 335 | 574 |
| Assyout (A) | 1 | 0 | 85 | 1-10 | 2 | 3 | 5 | 14 | 9 | 14 | 4 | 6 | 57 | 266 | 141 | 83 | 604 |
| | | | | 11-27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 14 | 14 | 30 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 2 | 3 | 5 | 14 | 9 | 14 | 4 | 6 | 57 | 268 | 155 | 97 | 634 |

**Table A 5 (contd.)—NUMBER IN HOURS OF OCCURRENCE OF CONCURRENT SURFACE
WIND SPEED AND DIRECTION RECORDED WITHIN SPECIFIED RANGES**

NOVEMBER — 1966

| Station | calm (hours) | Variable (hours) | Unrecorded (hours) | Wind speed in knots | Number in hours of occurrences of wind blowing from the ranges of directions indicated | | | | | | | | | | | | All directions |
|---------------------|--------------|------------------|--------------------|------------------------|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| | | | | | 345 / 014 | 015 / 044 | 045 / 074 | 075 / 104 | 105 / 134 | 135 / 164 | 165 / 194 | 195 / 224 | 225 / 254 | 255 / 284 | 285 / 314 | 315 / 344 | |
| Luxor (A) | 9 | 3 | 23 | 1-10 | 122 | 134 | 73 | 30 | 27 | 32 | 65 | 35 | 18 | 27 | 24 | 62 | 649 |
| | | | | 11-27 | 0 | 1 | 24 | 8 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 36 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 122 | 135 | 97 | 38 | 27 | 34 | 65 | 35 | 18 | 27 | 25 | 63 | 685 |
| Aswan (A) | 2 | 0 | 1 | 1-10 | 183 | 219 | 59 | 25 | 25 | 9 | 13 | 1 | 3 | 1 | 11 | 49 | 598 |
| | | | | 11-27 | 18 | 33 | 33 | 22 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 119 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 201 | 252 | 92 | 47 | 36 | 9 | 13 | 1 | 3 | 1 | 11 | 51 | 717 |
| Siwa | 26 | 91 | 3 | 1-10 | 14 | 37 | 76 | 62 | 65 | 33 | 31 | 16 | 42 | 81 | 83 | 30 | 570 |
| | | | | 11-27 | 1 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 11 | 13 | 30 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 15 | 37 | 76 | 66 | 65 | 34 | 31 | 16 | 42 | 81 | 94 | 43 | 600 |
| Dakhla | 7 | 5 | 0 | 1-10 | 34 | 26 | 18 | 12 | 12 | 5 | 28 | 50 | 86 | 108 | 194 | 128 | 701 |
| | | | | 11-27 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 7 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 36 | 26 | 18 | 12 | 12 | 5 | 28 | 50 | 86 | 108 | 194 | 133 | 708 |
| Kharga | 26 | 9 | 34 | 1-10 | 185 | 158 | 14 | 17 | 10 | 5 | 4 | 3 | 7 | 14 | 30 | 101 | 548 |
| | | | | 11-27 | 69 | 29 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 103 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 254 | 187 | 14 | 17 | 10 | 5 | 5 | 3 | 7 | 14 | 31 | 104 | 651 |
| Qusair | 4 | 14 | 8 | 1-10 | 92 | 47 | 21 | 18 | 3 | 5 | 4 | 8 | 9 | 149 | 180 | 44 | 580 |
| | | | | 11-27 | 58 | 7 | 3 | 5 | 3 | 1 | 1 | 0 | 0 | 0 | 5 | 31 | 114 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 150 | 54 | 24 | 23 | 6 | 6 | 5 | 8 | 9 | 149 | 185 | 75 | 694 |
| Hurghada | 38 | 0 | 5 | 1-10 | 28 | 30 | 27 | 18 | 11 | 12 | 19 | 5 | 6 | 23 | 122 | 34 | 335 |
| | | | | 11-27 | 50 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 151 | 93 | 342 |
| | | | | 28-47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | ≥48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | All speeds | 78 | 45 | 34 | 18 | 11 | 12 | 19 | 5 | 6 | 49 | 273 | 127 | 677 |

UPPER AIR CLIMATOLOGICAL DATA

Table B 1. - MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

NOVEMBER - 1966

| Station | Pressure Surface Millibar | Altitude of Pressure Surface (gpm) | | | | Temperature (°C) | | | | Dew Point (°C) | |
|------------------|------------------------------|------------------------------------|---------|---------|--------|------------------|-------|---------|--------|----------------|-------|
| | | N | Mean | Highest | Lowest | N | Mean | Highest | Lowest | N | Mean |
| Helwan 0000 U.T. | Surface | 30 | 999* mb | 1002mb | 993mb | 30 | 19.9 | 25.1 | 15.4 | 30 | 12.4 |
| | 1000 | 30 | 127 | 158 | 78 | 15 | 20.2 | 25.1 | 16.6 | 15 | 10.7 |
| | 850 | 30 | 1520 | 1560 | 1456 | 30 | 14.5 | 20.8 | 8.0 | 30 | 1.2 |
| | 700 | 30 | 3131 | 3197 | 3035 | 30 | 4.1 | 9.8 | - 2.4 | 20 | - 7.6 |
| | 600 | 30 | 4369 | 4459 | 4245 | 30 | - 3.3 | 3.1 | -11.0 | 9 | -14.6 |
| | 500 | 30 | 5786 | 5913 | 5645 | 30 | -12.6 | - 5.4 | -18.4 | 8 | -21.7 |
| | 400 | 30 | 7444 | 7622 | 7274 | 30 | -25.3 | -18.3 | -29.0 | 11 | -31.6 |
| | 300 | 30 | 9475 | 9707 | 9268 | 30 | -40.9 | -33.2 | -45.8 | — | — |
| | 200 | 30 | 12123 | 12439 | 11915 | 30 | -57.8 | -50.8 | -61.6 | — | — |
| | 150 | 27 | 13920 | 14268 | 13748 | 27 | -62.0 | -55.3 | -66.0 | — | — |
| | 100 | 26 | 16399 | 16802 | 16300 | 26 | -66.9 | -59.2 | -71.4 | — | — |
| | 70 | 22 | 18530 | 18690 | 18440 | 22 | -67.5 | -59.0 | -74.7 | — | — |
| | 60 | 20 | 19462 | 19662 | 19356 | 20 | -65.8 | -58.7 | -76.3 | — | — |
| | 50 | 18 | 20576 | 20785 | 20420 | 18 | -62.6 | -58.2 | -67.5 | — | — |
| | 40 | 14 | 21965 | 22192 | 21773 | 14 | -59.9 | -54.6 | -67.1 | — | — |
| | 30 | 11 | 23790 | 24052 | 24052 | 11 | -56.3 | -51.4 | -61.9 | — | — |
| | 20 | 9 | 26413 | 26694 | 26215 | 9 | -50.7 | -42.6 | -56.1 | — | — |
| | 10 | — | — | — | — | — | — | — | — | — | — |

N = Number of observations of specified pressure surface.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

Note. Climatological upper air data for Mersa Matruh & Aswan upper air stations at 0000 & 1200 U.T. are missing since number of days of release of radiosonde sets at these stations are less than the permissible number needed for calculating or processing monthly values.

UPPER AIR CLIMATOLOGICAL DATA

Table B 1 (contd.)—MONTHLY MEANS, ABSOLUTE HIGHER AND LOWER VALUES OF ALTITUDE, AIR TEMPERATURE AND DEW POINT AT STANDARD AND SELECTED PRESSURE SURFACES

NOVEMBER — 1966

| Station | Pressure Surface Millibar | Altitude of Pressure Surface (gpm) | | | | Temperature (°C) | | | | Dew Point (°C) | |
|-----------------|---------------------------|------------------------------------|-------|---------|--------|------------------|-------|---------|--------|----------------|-------|
| | | N | Mean | Highest | Lowest | N | Mean | Highest | Lowest | N | Mean |
| Eleva 1200 U.T. | Surface | 30 | 998mb | 1002mb | 992mb | 30 | 27.2 | 35.0 | 22.7 | 30 | 10.7 |
| | 1000 | 30 | 122 | 168 | 68 | 7 | 27.7 | 35.0 | 24.2 | 7 | 9.6 |
| | 850 | 30 | 1526 | 1575 | 1454 | 30 | 15.2 | 23.4 | 8.7 | 29 | 0.5 |
| | 700 | 30 | 3136 | 3210 | 3038 | 29 | 4.8 | 8.8 | 0.1 | 17 | -9.3 |
| | 600 | 30 | 4379 | 4474 | 4257 | 30 | -2.5 | 4.0 | -7.6 | 9 | -16.5 |
| | 500 | 30 | 5800 | 5922 | 5651 | 30 | -11.5 | -5.0 | -16.1 | 7 | -23.1 |
| | 400 | 30 | 7472 | 7620 | 7286 | 30 | -24.6 | -19.7 | -29.9 | 9 | -31.3 |
| | 300 | 30 | 9503 | 9681 | 9267 | 30 | -40.4 | -36.8 | -46.2 | 3 | -42.4 |
| | 200 | 29 | 12156 | 12371 | 11927 | 29 | -57.5 | -49.7 | -62.4 | — | — |
| | 150 | 27 | 13962 | 14210 | 13759 | 27 | -61.1 | -55.8 | -65.6 | — | — |
| | 100 | 23 | 16456 | 16752 | 16294 | 23 | -65.6 | -58.0 | -70.3 | — | — |
| | 70 | 19 | 18628 | 18940 | 18500 | 19 | -65.2 | -60.4 | -70.3 | — | — |
| | 60 | 17 | 19549 | 19662 | 19421 | 17 | -62.7 | -58.0 | -68.3 | — | — |
| | 50 | 14 | 20698 | 20840 | 20578 | 14 | -59.0 | -56.1 | -62.5 | — | — |
| | 40 | 12 | 22117 | 22284 | 21975 | 12 | -55.3 | -52.5 | -59.0 | — | — |
| | 30 | 7 | 23984 | 24156 | 23865 | 7 | -52.0 | -48.5 | -55.0 | — | — |
| | 20 | 4 | 26694 | 26826 | 26606 | 4 | -49.6 | -48.3 | -51.3 | — | — |
| | 10 | 1 | 31302 | — | — | 1 | -43.5 | — | — | — | — |

N = Number of observations of specified pressure surface.

* The atmospheric pressure corrected to the elevation of the radiosonde stations.

**TABLE B 2.—MEAN AND EXTREME VALUES OF THE FREEZING LEVEL AND THE TROPOPAUSE;
THE HIGHEST WIND SPEED IN THE UPPER AIR**

NOVEMBER — 1966

| Station | Freezing level | | | | | | | | | First Tropopause | | | | | | | | | Highest wind speed | | | | |
|-----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|------------------|----------------|----------------|------------------|----------------|----------------|------------------|--------------------|----------------|----------------------|----------------|-----|
| | Mean | | | Highest | | | Lowest | | | Mean | | | Highest | | | Lowest | | | Altitude (gpm) | Pressure (mb.) | Direction (000—360)° | Speed in knots | |
| | Altitude (gpm) | Pressure (mb.) | Dew point (°C) | Altitude (gpm) | Pressure (mb.) | Dew point (°C) | Altitude (gpm) | Pressure (mb.) | Dew point (°C) | Altitude (gpm) | Pressure (mb.) | Temperature (°C) | Altitude (gpm) | Pressure (mb.) | Temperature (°C) | Altitude (gpm) | Pressure (mb.) | Temperature (°C) | | | | | |
| 0000 UT | M. Matruh (A) | (N) | (N) | (N) | — | — | — | — | — | — | (N) | (N) | (N) | — | — | — | — | — | — | — | — | — | |
| | Helwan . . . | 3850 (30) | 641 (30) | - 6.7 (12) | 5000 | 560 | — | 2750 | 726 | - 2.5 | 13492 (28) | 166 (28) | -62.5 (28) | 18320 | 74 | -64.7 | 11220 | 222 | -53.4 | 9310 | 305 | 270 | 126 |
| | Aswan . . (A) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| 1800 U.T. | M. Matruh (A) | (N) | (N) | (N) | — | — | — | — | — | — | (N) | (N) | (N) | — | — | — | — | — | — | — | — | — | |
| | Helwan . . . | 3936 (30) | 637 (30) | -10.4 (12) | 4960 | 564 | — | 3100 | 698 | -5.3 | 13078 (26) | 154 (26) | -63.4 (26) | 17570 | 83 | -69.8 | 10070 | 271 | -48.2 | 11700 | 199 | 250 | 138 |
| | Aswan . . (A) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |

N — The number of cases the element has been observed during the month.

**Table B 3.—NUMBER OF OCCURRENCES OF WIND DIRECTION WITHIN SPECIFIED RANGES AND
THE MEAN SCALAR WIND SPEED AT THE STANDARD AND SELECTED PRESSURE SURFACES
HELWAN — NOVEMBER 1966**

| Time | Pressure Surface (Millibar) | Wind between ranges of direction (000—360)* | | | | | | | | | | | | | | | | | | | | | | | | Number of Calm winds | Total Number of Observations (T N) | Mean Scalar wind Speed (Knots) | |
|-----------|--------------------------------|---|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-------------------------|---------------------------------------|-----------------------------------|----|
| | | 345 | | 015 | | 045 | | 075 | | 105 | | 135 | | 165 | | 195 | | 225 | | 255 | | 285 | | 315 | | | | | |
| | | / | | / | | / | | / | | / | | / | | / | | / | | / | | / | | / | | / | | | | | |
| | | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | N | (ff) | | | | |
| | | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | m | | | | |
| 0000 U.T. | Surface | 3 | 5 | 12 | 11 | 4 | 13 | 2 | 6 | 2 | 6 | 0 | — | 0 | — | 1 | 5 | 0 | — | 0 | — | 0 | — | 1 | 7 | 5 | 30 | 8 | |
| | 1000 | 1 | 10 | 7 | 12 | 3 | 12 | 1 | 8 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 7 | 2 | 15 | 10 | |
| | 850 | 4 | 13 | 2 | 14 | 1 | 12 | 5 | 10 | 1 | 7 | 3 | 8 | 2 | 7 | 3 | 7 | 2 | 10 | 2 | 12 | 3 | 7 | 2 | 9 | 0 | 30 | 10 | |
| | 700 | 1 | 17 | 2 | 10 | 0 | — | 2 | 12 | 3 | 6 | 3 | 9 | 3 | 12 | 4 | 15 | 5 | 20 | 5 | 17 | 0 | — | 2 | 10 | 0 | 30 | 14 | |
| | 600 | 2 | 14 | 1 | 3 | 0 | — | 2 | 14 | 0 | — | 0 | — | 2 | 8 | 3 | 17 | 15 | 27 | 4 | 18 | 1 | 2 | 0 | — | 0 | 30 | 15 | |
| | 500 | 1 | 27 | 0 | — | 3 | 15 | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 12 | 10 | 28 | 8 | 21 | 5 | 12 | 2 | 17 | 0 | 30 | 21 | |
| | 400 | 1 | 8 | 2 | 25 | 0 | — | 0 | — | 0 | — | 0 | — | 2 | 33 | 3 | 39 | 14 | 33 | 4 | 20 | 4 | 23 | 0 | — | 0 | 30 | 29 | |
| | 300 | 1 | 67 | 2 | 27 | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 21 | 0 | — | 5 | 47 | 11 | 45 | 7 | 33 | 2 | 26 | 0 | 29 | 40 | |
| | 200 | 2 | 32 | 1 | 23 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 75 | 13 | 59 | 8 | 50 | 2 | 36 | 0 | 27 | 52 | |
| | 150 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 4 | 50 | 10 | 56 | 5 | 31 | 2 | 39 | 0 | 21 | 47 | |
| | 100 | 2 | 32 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 2 | 53 | 0 | — | 1 | 28 | 2 | 32 | 0 | — | 0 | 7 | 37 | |
| | 70 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 2 | 26 | 2 | 22 | 0 | — | 0 | 4 | 24 | |
| | 60 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 6 | 0 | — | 0 | — | 1 | 22 | 2 | 18 | 0 | — | 0 | 4 | 16 | |
| | 50 | 1 | 7 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 6 | 0 | — | 0 | 3 | 6 | |
| 40 | 1 | 5 | 0 | — | 1 | 19 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 5 | 0 | — | 0 | — | 0 | 3 | 10 | | |
| 30 | 0 | — | 0 | — | 0 | — | 1 | 10 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | 1 | 10 |
| 20 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 6 | 0 | — | 0 | — | 0 | 1 | 6 |
| 1200 U.T. | Surface | 5 | 12 | 5 | 16 | 2 | 20 | 1 | 8 | 0 | — | 1 | 10 | 0 | — | 0 | — | 5 | 10 | 4 | 6 | 3 | 10 | 4 | 6 | 0 | 30 | 11 | |
| | 1000 | 2 | 12 | 2 | 20 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 2 | 6 | 0 | — | 1 | 10 | 0 | 7 | 12 | |
| | 850 | 4 | 10 | 2 | 7 | 6 | 10 | 1 | 7 | 2 | 5 | 1 | 3 | 3 | 9 | 2 | 9 | 5 | 13 | 3 | 7 | 0 | — | 1 | 9 | 0 | 30 | 9 | |
| | 700 | 1 | 12 | 1 | 12 | 2 | 20 | 1 | 14 | 1 | 8 | 3 | 11 | 3 | 10 | 6 | 20 | 6 | 17 | 2 | 16 | 2 | 8 | 2 | 15 | 0 | 30 | 15 | |
| | 600 | 1 | 5 | 1 | 27 | 1 | 10 | 1 | 14 | 1 | 3 | 2 | 10 | 2 | 4 | 4 | 19 | 8 | 18 | 2 | 30 | 4 | 18 | 3 | 18 | 0 | 30 | 16 | |
| | 500 | 1 | 40 | 0 | — | 1 | 16 | 1 | 16 | 0 | — | 1 | 4 | 2 | 8 | 3 | 8 | 10 | 26 | 5 | 28 | 4 | 23 | 2 | 22 | 0 | 30 | 22 | |
| | 400 | 0 | — | 1 | 17 | 1 | 16 | 0 | — | 0 | — | 0 | — | 1 | 6 | 1 | 13 | 6 | 42 | 12 | 30 | 7 | 29 | 1 | 45 | 0 | 30 | 30 | |
| | 300 | 2 | 32 | 0 | — | 0 | — | 0 | — | 1 | 20 | 0 | — | 0 | — | 0 | — | 4 | 45 | 13 | 42 | 5 | 24 | 3 | 50 | 0 | 28 | 39 | |
| | 200 | 2 | 30 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 50 | 1 | 194 | 15 | 57 | 6 | 46 | 1 | 56 | 0 | 26 | 58 | |
| | 150 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 44 | 14 | 42 | 5 | 61 | 3 | 45 | 0 | 23 | 47 | |
| | 100 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 16 | 1 | 20 | 9 | 34 | 1 | 31 | 1 | 18 | 0 | 13 | 30 | |
| | 70 | 1 | 20 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 6 | 0 | — | 4 | 20 | 1 | 3 | 0 | — | 0 | 7 | 15 | |
| | 60 | 1 | 12 | 1 | 16 | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 8 | 1 | 10 | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 5 | 9 | |
| | 50 | 0 | — | 0 | — | 0 | — | 0 | — | 3 | 23 | 1 | 3 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | 4 | 18 | |
| 40 | 0 | — | 0 | — | 1 | 15 | 1 | 42 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | 2 | 28 | | |
| 30 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 1 | 18 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | 1 | 18 | | |
| 20 | 1 | 20 | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | — | 0 | 1 | 20 | | |
| 10 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | | |

N = The number of cases the element has been observed during th^o month.

TN = The total number of cases the wind has been observed for all directions during the month.

REVIEW OF AGRO-METEOROLOGICAL STATIONS

EL KASR — NOVEMBER 1966

This month was warmer and more rainy than normal. The mean daily air temperature at 2 metres height above ground was 1.8°C above normal. Total rainfall was 11.8 mm above normal. The month was characterised by two warm spells on 1st and 28th. The first spell was the most pronounced and was associated with the absolute maximum air temperature of the month, while the second was associated with the lowest relative humidity. Thundery showers occurred on 9th and 10th of the month.

The extreme maximum soil temperatures at depths between 0.3 and 100 cm were higher than the corresponding values of November 1965 ; the differences varied between 8.2°C at 0.3 cm depth and 2.2°C at 100 cm depth. The extreme minimum soil temperatures were also higher than the corresponding values of last November ; the differences varied between 6.8°C at 1 cm depth and 2.2°C at 20 cm depth.

The mean daily wind speed at 2 metres height above ground was 0.2 m/sec. lower than the corresponding value of November 1965. Mean daily Piche evaporation was 2.5 mm lower while mean daily pan evaporation was 0.93 mm higher than the corresponding values of last November. Total actual duration of bright sunshine was 18.1 hours lower than the corresponding value of November 1965.

TAHRIR — NOVEMBER 1966

This month was appreciably warmer and more humid than November 1965. The mean daily air temperature and relative humidity at 2 metres height above ground were 3.2°C and 6% higher than the corresponding values of last November. Total rainfall was 10.6 mm lower than the corresponding value of November 1965. The month was characterised by an intense heat wave in the first week with peak on 5th which was associated with the absolute maximum air temperature of the month.

The extreme maximum soil temperatures at depths between 0.3 and 100 cm were higher than the corresponding values of November 1965, the differences varied between 7.4°C at 0.3 cm depth and 2.2°C at 100 cm depth. The extreme minimum soil temperatures were also higher than the corresponding values of last November ; the differences varied between 3.5°C at 50 cm depth and 2.0°C at 2 cm depth.

The mean daily wind speed at 2 metres height above ground was the same as the corresponding value of November 1965. The mean daily Piche evaporation was 0.3 mm lower while the mean daily pan evaporation was 0.71 mm higher than the corresponding values of last November. The total actual duration of bright sunshine was 5.9 hours lower than the corresponding value of November 1965.

GIZA — NOVEMBER 1966

This month was warmer, slightly more humid and more rainy than normal. Mean daily air temperature and relative humidity at 2 metres height above ground were 2.3 °C and 3% respectively above normal. Total rainfall was 8.3 mm above normal. The month was characterised by two prolonged heat waves. The first heat wave occurred in the period 1st-8th with peak on 5th which was associated with the absolute maximum air temperature and the lowest relative humidity for the month.

The extreme maximum soil temperatures in the dry field at depths between 0.3 and 100 cm were higher than the corresponding values of November 1965 ; the differences varied between 8.1°C at 1 cm depth and 0.6°C at 100 cm depth. The extreme minimum soil temperatures were also higher than the corresponding values of last November, the differences varied between 3.7°C at 0.3 cm depth and 1.1°C at 20 cm depth.

The mean daily wind speed at 2 metres height above ground was 0.2 m/sec. higher than the corresponding value of November 1965. The mean daily Piche evaporation, pan evaporation and potential evapotranspiration were higher than the corresponding values of last November by 0.6, 0.87 and 0.1 mm respectively. Total actual duration of bright sunshine was 22.5 hours lower than the corresponding value of November 1965.

KHARGA — NOVEMBER 1966

The month was appreciably warmer than normal. The mean daily air temperature at 2 metres height above ground was 4.3°C above normal. Total rainfall was zero, i.e. 0.1 mm below normal. The month was characterised by two prolonged heat waves in the periods 1st-8th and 18th-30th. The first one was the most excessive and was associated with the absolute maximum air temperature of the month on the 1st. The peak of the second heat wave occurred on 21st and was associated with the lowest values of relative humidity and vapour pressure for the month.

The extreme maximum soil temperatures at depths between 0.3 and 100 cm were higher than the corresponding values of November 1965 ; the differences varied between 9.7°C at 1cm depth and 0.7°C at 100 cm depth. The extreme minimum soil temperatures were also higher than the corresponding values of last November ; the differences varied between 5.6°C at 1 cm depth and 2.6°C at 100 cm depth.

The mean daily wind speed at 2 metres height above ground was 0.6 m/sec. lower than the corresponding value of November 1965. Mean daily values of Piche evaporation and pan evaporation were 4.9 mm and 1.80 mm higher than the corresponding values of last November. Total actual duration of bright sunshine was only one hour higher than the corresponding value of November 1965.

Table C 1.—AIR TEMPERATURE AT 2 METRES ABOVE GROUND

NOVEMBER — 1966

| STATION | Air Temperature (°C) | | | | | Mean Duration in hours of daily air temperature above the following values | | | | | | | | | | |
|-------------------|----------------------|-----------|-----------------|-----------------|---------------|--|------|------|------|------|------|------|------|------|------|------|
| | Mean Max. | Mean Min. | Mean of the day | Night time mean | Day time mean | -5°C | 0°C | 5°C | 10°C | 15°C | 20°C | 25°C | 30°C | 35°C | 40°C | 45°C |
| El Kasr | 24.9 | 15.3 | 20.3 | 18.6 | 22.6 | 24.0 | 24.0 | 24.0 | 24.0 | 22.0 | 13.9 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Tahrir | 27.6 | 15.5 | 20.4 | 18.6 | 23.2 | 24.0 | 24.0 | 24.0 | 24.0 | 21.0 | 11.3 | 4.2 | 0.7 | 0.0 | 0.0 | 0.0 |
| Giza | 27.5 | 15.5 | 21.0 | 19.5 | 23.1 | 24.0 | 24.0 | 24.0 | 24.0 | 21.8 | 14.0 | 4.4 | 0.8 | 0.0 | 0.0 | 0.0 |
| Kharga | 31.8 | 16.8 | 24.5 | 22.2 | 27.3 | 24.0 | 24.0 | 24.0 | 24.0 | 23.5 | 18.3 | 10.6 | 4.0 | 0.0 | 0.0 | 0.0 |

Table C 2.—ABSOLUTE VALUES OF AIR TEMPERATURE AT 2 METRES ABOVE GROUND, ABSOLUTE MINIMUM AIR TEMPERATURE AT 5cms ABOVE GROUND OVER DIFFERENT FIELDS.

NOVEMBER — 1966

| STATION | Max. Temp. at 2 metres (°C) | | | | Min. Temp. at 2 metres (°C) | | | | Min. Temp. at 5 cms. above (°C) | | | |
|-------------------|-----------------------------|------|--------|------|-----------------------------|------|--------|------|---------------------------------|------|-------|------|
| | Highest | | Lowest | | Highest | | Lowest | | Dry soil | | Grass | |
| | Value | Date | Value | Date | Value | Date | Value | Date | Value | Date | Value | Date |
| El Kasr | 29.2 | 1 | 21.9 | 30 | 20.4 | 22 | 12.2 | 16 | 10.1 | 19 | — | — |
| Tahrir | 33.1 | 5 | 21.8 | 10 | 20.0 | 2 | 10.6 | 27 | — | — | — | — |
| Giza | 34.9 | 5 | 23.5 | 30 | 20.4 | 21 | 10.4 | 28 | 7.2 | 17 | 5.2 | 17 |
| Kharga | 37.4 | 1 | 26.9 | 16 | 23.2 | 23 | 12.0 | 12 | 9.1 | 11 | — | — |

Table C 3.—(SOLAR+SKY) RADIATION, DURATION OF BRIGHT SUNSHINE, RELATIVE HUMIDITY, VAPOUR PRESSURE AT 2 METRES ABOVE GROUND, EVAPORATION & RAINFALL

NOVEMBER — 1966

| STATION | (Solar+Sky) Radia- tion gm. cal/cm ² | Duration of Bright Sunshine (hours) | | | Relative Humidity | | | | | | Vapour pressure (mms) | | | | | | Evaporation (mms) | | Rainfall (mms) | | | |
|---------|--|--|---------------------------|----|----------------------|------|-------------|-----------|--------|------|-----------------------|-----------|---------|------|--------|------|----------------------|-------------|---------------------------|-------------------------|------|--|
| | | Total Actual monthly | Total Possible monthly | % | Duration in hours | | Mean of day | 1200 U.T. | Lowest | Date | Mean of day | 1200 U.T. | Highest | Date | Lowest | Date | Piche | Pan class A | Total Accu- at Monthly | Max. Fall in one day | Date | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 90 | 80 | | | | | | | | | | | | | | | | |
| El Kasr | 246.5 | 238.1 | 317.8 | 75 | — | — | 80 | 64 | 32 | 28 | 14.4 | 14.5 | 19.4 | 7 | 6.1 | 30 | 7.1 | 5.47 | 38.7 | 25.2 | 8 | |
| Tahrir | 318.8 | 238.0 | 317.7 | 76 | 10.0 | 14.0 | 81 | 56 | 37 | 29 | 14.5 | 14.3 | 20.7 | 2 | 9.5 | 29 | 5.7 | 4.17 | 7.6 | 5.8 | 8 | |
| Giza . | 312.2 | 233.0 | 320.2 | 73 | 6.0 | 11.0 | 73 | 48 | 25 | 5 | 13.3 | 12.5 | 18.6 | 1 | 8.3 | 10 | 7.4 | 4.89 | 10.8 | 10.1 | 8 | |
| Kharga | 339.0 | 306.4 | 328.3 | 93 | 0 | 0 | 38 | 25 | 12 | 21 | 8.2 | 8.3 | 14.0 | 1 | 4.9 | 21 | 22.7 | 11.02 | 0.0 | 0.0 | — | |

**TABLE C 4. EXTREME SOIL TEMPERATURE AT DIFFERENT DEPTHS (cms)
IN DIFFERENT FIELDS**

NOVEMBER — 1966

| STATION | Highest (H) Lowest (L) | Extreme soil temperature (°C) in dry field at different depths (cms.) | | | | | | | | | | Extreme soil temperature (°C) in grass field at different depths (cms.) | | | | | | | | | |
|----------------|---------------------------|--|------|------|------|------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|-----|
| | | 0.3 | 1 | 2 | 5 | 10 | 20 | 50 | 100 | 200 | 300 | 0.3 | 1 | 2 | 5 | 10 | 20 | 50 | 100 | 200 | 300 |
| El Kaar. . . . | H | 37.2 | 33.3 | 33.4 | 32.4 | 28.4 | 25.5 | 24.5 | 24.5 | 24.4 | — | — | — | — | — | — | — | — | — | — | — |
| | L | 11.6 | 13.0 | 13.6 | 13.8 | 15.2 | 16.4 | 20.2 | 22.1 | 23.2 | — | — | — | — | — | — | — | — | — | — | — |
| Tahrir. . . . | H | 43.4 | 42.7 | 36.2 | 38.1 | 33.8 | 29.7 | 27.4 | 27.4 | 27.8 | 27.6 | — | — | — | — | — | — | — | — | — | — |
| | L | 11.6 | 12.4 | 11.8 | 14.9 | 16.1 | 19.1 | 21.7 | 23.8 | 25.8 | 26.3 | — | — | — | — | — | — | — | — | — | — |
| Giza. | H | 46.7 | 44.2 | 40.6 | 35.1 | 31.3 | 28.8 | 28.6 | 29.0 | 28.4 | 27.4 | 31.0 | 29.4 | 27.4 | 25.6 | 24.9 | 24.1 | 24.4 | 24.4 | 24.6 | — |
| | L | 10.0 | 11.6 | 11.7 | 16.0 | 19.1 | 21.8 | 24.3 | 26.4 | 27.4 | 27.2 | 11.8 | 13.0 | 13.6 | 15.6 | 17.1 | 18.7 | 21.3 | 22.6 | 24.0 | — |
| Kharga. . . . | H | — | — | 42.5 | 38.9 | 33.6 | 31.4 | 31.0 | 31.0 | 31.1 | 30.2 | — | — | — | — | — | — | — | — | — | — |
| | L | — | — | 14.1 | 17.4 | 22.0 | 24.9 | 27.7 | 29.0 | 30.1 | 30.0 | — | — | — | — | — | — | — | — | — | — |

TABLE C 5.—SURFACE WIND

NOVEMBER — 1966

| STATION | Wind Speed m/sec at 2 metres | | | Days with surface wind speed at 10 metres. | | | | | | | Max. Gust (knots) at 10 metres | |
|----------------|---------------------------------|-----------------------|---------------------|--|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------------------|-------|
| | Mean of the day | Night time mean | Day time mean | ≥ 10 knots | ≥ 15 knots | ≥ 20 knots | ≥ 25 knots | ≥ 30 knots | ≥ 35 knots | ≥ 40 knots | Value (knots) | Date |
| El Kaar. . . . | 3.4 | 2.9 | 4.0 | — | — | — | — | — | — | — | — | — |
| Tahrir. . . . | 3.0 | 1.8 | 2.3 | 20 | 10 | 2 | 0 | 0 | 0 | 0 | 32 | 10 th |
| Giza. | 3.2 | 1.8 | 2.8 | 22 | 6 | 0 | 0 | 0 | 0 | 0 | 25 | 10 th |
| Kharga. . . . | 3.3 | 2.5 | 4.3 | 29 | 15 | 1 | 0 | 0 | 0 | 0 | 26 | 14 th |

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